

NEPC Review: Student-Centered State Funding: A How-to Guide for State Policymakers (The Foundation for Excellence in Education, November 2017)



Reviewer:

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NEPC REVIEW: STUDENT-CENTERED STATE FUNDING: A HOW-TO GUIDE FOR STATE POLICYMAKERS (THE FOUNDATION FOR EXCELLENCE IN EDUCATION, NOVEMBER 2017)

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Summary of Review

The policy brief Student-Centered State Funding: A How-to Guide for State Policymakers attempts to illustrate and explain to state policymakers how to design a state school funding system whereby all state and local dollars may flow freely, by parental choice, following children to local district, charter or private schools. In particular, the brief seeks to provide state policy guidance on setting specific funding levels for each child. These "money follows the child" approaches provide a system that eases the process of funding an assortment of school choice programs. Unfortunately, this colorful multi-page infographic suffers from three major shortcomings as a guide for state policymakers: First, the brief advances the false dichotomy that advocates for state and district school finance systems to focus on funding the child, not funding the essential institutions that serve those children. This dichotomy wrongly promotes the idea that there is no benefit to children of equitably and adequately financing educational institutions. Second, the brief is based on overly simplistic, frequently misrepresented, and often outright incorrect versions of the status quo, including overbroad mischaracterizations of how schools are currently financed. Third, the details of the brief's proposals and espoused benefits are entirely speculative and unsubstantiated, in some cases simply made up and in other cases supported only by insular and circular self-citation to previous work that itself cites no strong empirical support. For these reasons and others, the report is of absolutely no value to policymakers for informing the design of state school finance systems or school district resource allocation formulas.



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I. Introduction

The policy brief *Student-Centered State Funding: A How-to Guide for State Policymakers,* published by The Foundation for Excellence in Education (Excel*in*Ed),¹ attempts to illustrate and explain to state policymakers how to design a state school funding system whereby all state and local dollars may flow freely, by parental choice, with children to local district, charter or private schools. The intent of the brief is to provide guidance on setting specific funding levels for each child, in state policy, to enable any flavor of school choice program.

This policy brief presents student-centered funding as a panacea for achieving transparency and equity, as well as both parent and district empowerment. The brief begins with broad, unsubstantiated proclamations like:

Too often, debates about state education funding focus solely on how much money should be provided to school districts. Far too little attention is paid to an equally or more important question: How can your state maximize the impact of existing funding? (p. 1)

...implying that no one but themselves have given the question any thought. The brief speaks of a status quo where, via the complexities and opacity of state school finance policy:

- District leaders are hamstrung by a multitude of restrictions that lock in antiquated instructional models and prevent them from addressing the unique needs of their students.
- Districts get different funding amounts irrespective of the number of students they serve or their special needs and disadvantages.

• High-performing districts have no incentive to grow enrollment, and parents are penalized if they move their children to another district. (p. 1)

To wit, they boldly conclude:

Student-centered funding addresses these problems. It means nearly all funding is provided to districts based on how many students they serve. Funds are also provided to address specific needs and challenges those students might have. Funding for each student follows him or her to any district to ensure his or her needs can be met, regardless of district boundaries. (p. 1)

Unfortunately, this multi-page, colorful infographic suffers (at least) three major shortcomings as a guide for state policymakers:

First, the brief advances the false dichotomy that state and district school finance systems should focus on funding the child, not funding the (bureaucratic, adult-centered) institutions that serve those children. This false dichotomy wrongly asserts there is no benefit to children of equitably and adequately financing educational institutions, and ignores the fact that it ultimately takes institutions, institutional structures and governance to deliver the relevant and appropriate programs and services. This undermines the design of equitable, adequate and efficient state and district school finance systems.

Second, the brief is based on overly simplistic, frequently misrepresented, and often outright incorrect versions of the status quo. This includes both overbroad mischaracterizations of how schools are currently financed (conflating and confusing state school finance formulas with district budget allocation strategies), and misrepresentation, mainly by omission, of the state of the literature for guiding the design of better finance systems.

Third, the details of the brief's proposals and espoused benefits are entirely speculative and unsubstantiated, in some cases simply made up and in others, supported only by insular and circular self-citation to previously made-up stuff.

II. Findings and Conclusions of the Report

The brief's central premise is that adopting "student-centered" funding to enable parental choice of schools necessarily leads to a fairer and more transparent system for financing children's schooling. As noted in the introduction, the brief is predicated on the wrong assumption that most if not all state school finance systems and district budgeting models (without delineating between the two) operate in a way that favors institutions (and adult interests) over children. Therefore, student-centered state funding is THE logical solution. The report lays out the following principles for pursuing "student-centered state funding."

- Nearly all funding is provided to districts based on how many students they serve;
- Funds are also provided to address specific needs and challenges those students might have; and

• Funding for each student follows him or her to any district to ensure his or her needs can be met, regardless of district boundaries. (p. 3)

That is, the exclusive drivers of the amount and distribution of funding districts receive – in combined state and local funding – should be the numbers and types of children served. In state school finance formulas, this is largely the case already.

The approach as proposed, however, presumes that the only "costs" (absent any definition) associated with achieving equity or "fairness" (absent any conception) are those associated with different attributes of individual children. Further, that the costs associated with achieving equity transfer, without variation, from one setting to another. That is, what it takes to provide equitable or adequate education to any one child is the same regardless of institutional, geographic or peer context. The report grudgingly acknowledges, and quickly sidesteps possible exceptions along the way, including variation in labor costs and the possibility of costs associated with small schools or districts.

The brief concludes that these four benefits will logically flow from adopting student- centered budgeting:

- First, it is more transparent. It is clear and easy to understand how much funding each district gets and why.
- Second, it empowers districts. District leaders have flexibility to use funds to meet the unique needs of their students.
- Third, it empowers parents. Parents can choose the district that is best for their children, with the money fully following their students.
- Finally, it is fairer. All students in your state get the same base resources, with additional funding for students with special needs or disadvantages. (p. 3)

The claim that student-centered funding is "more transparent" is based on mischaracterizations of the status quo as well as misrepresentation of the proposed alternative. More transparent than what, one might ask? And are the weighted student formulas that fall under the umbrella of "student-centered" funding necessarily always more transparent? The brief presumes a uniform, monolithic, dysfunctional, opaque and overly complex status quo, to be contrasted with a simple, elegant student-centered alternative. Many states use weighted student formulas like those preferred in this brief, and most of those formulas are criticized for their complexity and opacity.

On the second point, district flexibility, the report conflates regulatory concerns with formula design, though certainly the delivery of more aid in the form of general aid and less in the form of categorical aid can reduce district budgeting constraints.² The third benefit – parental empowerment to choose - relies on the presence of choices, and depends on the false assumption that a child's marginal costs are the same regardless of the district or school he or she attends.

Finally, the fourth point relies on the unsubstantiated conclusion that adoption of "stu-

dent-centered" funding necessarily leads to greater resource equity across children. Given that the brief provides no conception of equity and thus excludes many of the factors that go into providing equity, using this report as a guide is highly unlikely to lead to a fairer system for all, or any, children.

Finally, the brief ignores outright, the *other* major goal of state school finance formulas, which is to ensure that local districts, regardless of their fiscal capacity (property wealth and/or income), can levy equitable local tax effort and receive sufficient state to achieve the state's common outcome goals.

III. The Report's Rationale for Its Findings and Conclusions

The report relies heavily on the cloying assertion that funding children is better than funding institutions, and portrays "student-centered" state funding as a radical departure from the dysfunctional, opaque and overly complex status quo. The problems of the status quo are summarized by the authors as follows:

- First, **states fund specific staffing positions**, **services**, **programs or schools rather than students**. For example, states pay districts based on the number of teachers they have.
- Second, states have hold harmless provisions such that districts get the same funding even if they lose students.
- Third, states allow local funding of districts that is not dependent on the number of students.
- Finally, **states provide additional funding to districts that have a rela-tively small number of students**. If a student leaves one of these districts, only a portion of the funding follows him or her to a new district. (p. 4)

It has been asserted by those promoting a shift in <u>district budgeting practices</u> toward <u>weight-ed student funding</u>, that local public school districts too often use models which allocate personnel lines to schools and do so based primarily on internal district political power dynamics, rather than student needs. However, my own prior analyses have shown little difference in the equity achieved by districts using weighted funding versus those in the same state using personnel based allocation models.³ Weighted (student-centered) funding models merely create a different set of tools over which political power is asserted. Few if any states actually allocate state aid based on staffing positions, programs or services.⁴

Most states actually use foundation aid formulas, which provide state aid to local districts to meet a specific target foundation level of funding, adjusted for student needs and other costs.⁵ In a few cases, that foundation level is set according to the summed costs of specific staffing ratios and compensation levels, as with Tennessee's Basic Education Program.⁶ Some program- based funding does exist in state school finance formulas.

State school finance systems include many features that severely undercut equity objectives, including but not limited to hold harmless provisions, tax relief aid and other "outside the formula" aid and grants.⁷ Categorical aid programs can add undue complexity and budgetary constraints and induce inefficiency.⁸

But the obsession in the Excel*in*Ed policy brief seems to be primarily on the fact that available funding for school districts is not 100% linked to the coming and going of individual students. Some states do have mechanisms in their funding formulas restricting local tax revenues based on per-pupil spending targets; that is, making local revenue sensitive to pupil counts. In some cases, like Kansas (Local Option/Supplemental Fund Budget)⁹ and Texas (Tier II)¹⁰, for example, revenue limits are tied to need-weighted per-pupil funding. States also set inter-district tuition rates, which define the tuition to be paid by the sending, or student's home district, regardless of whether that tuition is derived from state or local revenue sources.

Ignoring these policies, which to an extent keep in check per-pupil inequity resulting from local property tax revenues, Excel*in*Ed offers a bizarre illustration of how districts should increase or decrease their property taxes as enrollment shifts occur (p. 8), with no consideration whatsoever of the primary basis by which local contributions are determined in foundation aid formulas. That is, to ensure that local jurisdictions, regardless of their wealth, can attain adequate and equitable per-pupil resources.¹¹

Certainly, the ability of school districts to raise additional revenues via local property taxes continues to contribute to significant inequality in local public school districts in many states.¹² The authors do not address the property wealth equalization goals of state school finance formulas, which are elegantly illustrated in a recent Urban Institute policy brief.¹³

IV. The Report's Use of Research Literature

The Excel*in*Ed policy brief is shockingly bereft of conceptual or empirical underpinnings that could be used to guide and enhance the very policy proposals it espouses. Rather, the policy brief exists in an insular¹⁴ world of "alternative school finance facts" and unsubstantiated claims of success in certain policy contexts.

The authors appear to be unaware or simply ignore the vast body of peer reviewed literature for guiding a) the setting of foundation levels, based on "costs" of providing children with equal opportunities to achieve common outcome goals,¹⁵ b) the determination of additional costs associated with variation in individual student needs¹⁶ and in collective student population needs¹⁷, c) the additional costs associated with differences in economies of scale and population sparsity,¹⁸ and d) the differences in costs associated with geographic differences in competitive wages for teachers and other school staff.¹⁹ Additionally, literature dating back nearly 100 years addresses methods for determining equitable local contribution toward foundation spending levels.²⁰

Perhaps most importantly, the brief is devoid of a definition of education "costs" and any conception of "equity." One can't reasonably promote a policy for advancing equity or "fairness" without first knowing what equity or "fairness" means.²¹ In the current context, promoting student need-based school funding policies, a commonly accepted conception is one of providing all children, regardless of their individual needs or schooling context, with equal opportunity to achieve common outcome goals.²²

My own most recent rendering, from collaboration with Jesse Levin of the American Institutions for Research, of factors that affect the costs of providing equal education opportunity appears in Figure 1. Student demographic factors that affect the institutional costs of achieving common outcomes come in two parts – individual factors related to specific-student needs (language proficiency, disability) and collective population factors, including poverty, the concentration of poverty, and interaction of poverty with population density. These "social context" factors do not simply move with the child. A specific child's marginal cost in one social context setting might be quite different than in another. The Excel*in*Ed brief addresses, at best, only one element of the "cost of equal opportunity" diagram, paying short shrift to concerns over labor cost variation, and taking a particularly negative, punitive stance on costs associated with economies of scale.

FIGURE 1. Factors Associated with the Costs of Providing Equal Educational Opportunity



Economies of Scale

Regarding small schools, or economies of scale related costs, the brief proposes:

Districts with a smaller number of students say that they have higher than average costs per student. They say they still need to have a certain number district administrators, for example. However, to provide extra base funding for small districts is not student-centered, because if a student leaves to attend a larger district, only a portion of the money follows. Nearly a third of states do not provide extra funding for smaller districts, who must make financial tradeoffs to keep their small size. (p. 7)

Citing as their only authority, an *EdBuild* summary of small district funding policies across states,²³ in the authors' view, small districts should each have to prove they face higher costs, despite the fact that a vast body of rigorous empirical literature already offers such proof.²⁴ The authors of this brief think those costs, if they even do exist, aren't student-centered, and because they find a problem with the idea that a students' marginal cost in a larger institution is less than it is in a much smaller one, which is, in fact, a well-established economic principle.

Further, the likelihood that a student from a small, remote rural school could simply transfer, at no significant transportation expense or personal cost/inconvenience, to a larger district, charter, or private school is slim. Indeed, state policies providing additional support for "inefficiently" small districts should consider whether those districts are small by choice or small by necessity, and use appropriate methods for determining additional aid.²⁵ The Excel*in*Ed report duly (though grudgingly) acknowledges the possibility that some small schools and districts might actually need this aid.²⁶

Geographic Adjustment for Wages/Input Prices

Regarding the need to address variations in competitive wages (input prices in Figure 1) across settings and regions within states, the authors opine:

... it is enormously complex and imprecise to make these adjustments fairly. Just because overall wages are higher in one district, it does not mean it costs more to hire teachers. Some lower wage, rural areas may have greater difficulty recruiting and retaining effective teachers. Also, cost of living changes over time, which means your state would need to regularly update any adjustments. However, any district losing money will resist the change, and states making cost of living base adjustments have found themselves locked into place, with little transparency or public understanding. For these reasons, it is best practice for your state to have the same base statewide. (p. 7)

States have struggled with the best ways to accommodate wage variation and some states have adopted cost adjustments that arguably do more harm than good. ²⁷ But this does not

negate the fact that competitive wages for teachers vary widely across labor markets within states, and the quality of the teacher workforce and teacher retention within regions are sensitive to the competitiveness of teacher wages, relative to other professions.²⁸

It is difficult to estimate wage models that capture fully the costs associated with recruiting and retaining teachers in proximal settings with varied working conditions (hedonic wage models).²⁹ However, standard models based on accessible data have been developed for addressing variations in relative competitiveness of teacher (to similarly educated non-teacher) wages across labor markets. ³⁰ Further, the original author and creator of the National Center for Education Statistics Education Comparable Wage Index, Lori Taylor of Texas A&M University, has continued producing national, annually updated, school district-level wage indices accounting for both inflation and regional wage variation and making those indices publicly available.³¹

To suggest that simply ignoring labor cost variation in state school finance policies is "best practice" is incomplete at best.

Declining Enrollment, Fixed, Step & Variable Costs

Similarly, the authors' treatment of funding related to declining enrollment fails to comprehend institutional cost structures, assuming falsely that accommodating differences in institutional costs has no relation to the provision of equitable or adequate services to children. Rather, in their view, any dollar that does not travel immediately with the child is a dollar spent inequitably and/or inefficiently. Reasonable, equitable and adequate state school finance policies account for the fact that the institutions providing services to the state's children must manage fixed costs (institutional overhead, including capital stock), step costs (classroom/level/site expenses which do not vary by student), and costs which vary at the level of the individual student. It is increasingly important that state school finance policies account for institutional budget constraints when considering expanding choice programs.³² All costs do not, nor can they, nor have they ever, regardless of institutional type, vary linearly at the level of each individual student.

Poverty Concentration/Social Context

The authors express their discomfort with the possibility of costs associated with social context (students and their peers collectively), such as costs associated with school or district poverty concentration, rather than just the income level of each individual child's family. The authors brashly attempt to discredit the relevance of these costs by declaring:

That is different than providing more overall funding for a low-income student who lives in a higher vs. lower poverty district. That is not student-centered funding, as it is based on the characteristic of a district, not a student. It means that the money will not follow a low-income student who moves to another district with fewer disadvantaged students. (p. 11)

Actually, this is based on characteristics of the students in the district, not the district. Here,

the authors choose to outright deny that the marginal costs of an additional low-income student in a predominantly low-income setting might be different from the marginal costs of that same student in a higher income setting, and that accommodating those costs might improve equity. Rather, the authors argue that policies subsidizing these costs create a disincentive for low- income students to move to high-income schools (or for high-income schools to take in low- income students, if those students could not bring with them, their full weight). Given a fixed constraint on total state funding, this means simply ignoring a legitimate driver of the cost of providing equal opportunity³³ and thus knowingly disadvantaging students in schools with higher concentrations of poverty, merely to preserve their dogmatic view that all funding can and should be "student centered." That is, the authors are rationalizing the maintenance of inequality, because it's just too hard to accommodate in their pro-choice framework.

Special Education³⁴

On special education, the authors rightly note that state attempts to limit exposure to increasing special education costs by funding special education at a flat (census-based) rate are problematic. As they note, without citation to relevant literature,³⁵ "this remedy is worse than the problem." In an attempt to capitulate to those who would argue that districts continue to over- classify students with disabilities in their attempt to chase additional state funding, the authors suggest that states can "combat overidentification and reward prevention and effective services. For example, your state can require districts to offer early intervention and prevention services, as is the case in Tennessee." (p. 11) A quick check of classification rate data from Tennessee schools indicates that they remain around the national average, as they have for some time now, and in recent years have grown faster than the national average (Figure A1).³⁶ While early intervention is a reasonable practice, it has no bearing here on the financing recommendation.

Competency-Based Incentive Funding

The most odd and unsubstantiated recommendation made in the brief is the proposal for "competency-based incentive funding," explained as follows:

your state may want to consider funding districts at least in part based on student success, rather than simply the number of students who are enrolled. For each competency a student earns, your state can provide a certain amount of funding to the district. If a student takes longer to achieve a competency, the district still receives the same amount of total funding. Conversely, if a student achieves a competency early, the district gets full funding for that competency, and the student can start working on more competencies, for which the district can receive additional funding. (p. 13)

This proposal is based on a prior brief from Excel*in*Ed,³⁷ and similar approaches may have a logical place in the financing of online course offerings.³⁸

The central problem with this proposal in this context is that it would work in direct counterbalance to student need weights. Student need weights and poverty concentration weights address the fact that it may take additional resources and effort for some students to reach desired outcome goals in a timely manner (e.g., on-time high school graduation while successfully completing college readiness standards). Providing additional funding for those who achieve standards more quickly (by providing more funding for achieving more standards in the same time frame) in all likelihood leads to providing more funding to those districts serving children who can achieve those standards more quickly. That is, those who are more advantaged from the outset. Assuming this incentive pool must be drawn from a fixed overall budget, this means taking money from legitimate need and cost weights and moving toward those who need it less.

V. Review of Report's Methods

There is no apparent method behind this report. There are no analyses to consider and no references to actual analyses that evaluate the equity, adequacy, efficiency, transparency, or flexibility outcomes of the proposals laid out within the report. The report is merely a statement of the authors' ideological policy preferences, displaying a complete lack of understanding of the topic if not overt contempt for well-understood factors affecting education costs and the provision of equal educational opportunity.

VI. Review of the Validity of the Findings and Conclusions

Their first claim is that moving to student-centered funding necessarily improves transparency. Student-centered funding was first promoted as a movement for district budgeting practices in the 1990s (drawing on elements of state school finance formulas from preceding decades). Seattle was among the early adopters, ³⁹ and eventually as the system became unwieldy and anything but transparent, Seattle disbanded the formula.⁴⁰

School finance formulas – either state aid formulas to local districts, or local district allocation formulas to schools – will always suffer complexity when they attempt to sufficiently account for the various factors that affect equal educational opportunity, and when they are subjected to political pressures and manipulation over time. Weighted formulas are no more or less inherently transparent than other alternatives. No matter the formula type, the assumptions and values behind the formula, and the relationship of formula components to those values and assumptions must be clear. The only clarity provided in the Excel*in*Ed brief is their dogmatic preference for linking each dollar to each student, even when that can't be done accurately or is entirely inconsistent with existing evidence on educational costs and equal opportunity.

As noted previously, providing more general and less categorical aid to districts does em-

power more flexible spending practices. At the same time, however, imposing a financing system that links each dollar dynamically with the movement of each child, ignoring fixed and step costs, places significant constraints on district planning. Whether gaining or losing, it injects instability into schools and districts.

Parent empowerment only exists where actual choices, equity of mobility among choices, and equity of access to information about choices exists within accessible geographic spaces, and may have little or nothing to do with the provision of "student-centered" funding. A variety of policy mechanisms can be used to determine the appropriate rates of tuition transfer/subsidy to empower parental choice, where and if choices exist.

If one considers only the elements of "student-centered" funding proposed in the Excel*in*Ed report, the resulting system would yield highly unequal educational opportunity, as it would ignore legitimate institutional cost differences and collective student population differences, all on the false premise that the marginal costs of providing each child equal educational opportunity do not vary by context.

Finally, to the extent that the end goal is to increase choice, it should be noted that increasing choices among different types of operators, with different financial and student service incentives, and different institutional cost structures and resource access, tends to erode, not enhance equity. That is, increased choice in common spaces often leads to increasingly unequal choices.⁴¹

VII. Usefulness of the Report for Guidance of Policy and Practice

The Excel*in*Ed glossy annotated infographic on student-centered state funding is of absolutely no value to state policymakers for informing the design of state school finance systems, or school district resource allocation formulas. While state school finance formulas do need a lot of work these days to provide more equitable and adequate opportunities for all children, many if not most are already advanced beyond the level of guidance and detail offered in the Excel*in*Ed brief. My personal experience with informed policymakers in many states suggests that they already have capacity and understanding of school finance that far outstrips what is offered in this brief. Thus, I have little concern they will be swayed.

For those who might be swayed by the Excel*in*Ed brief, the talking points offered in the brief provide too few specifics to inform actual policy design. The arguments offered in the brief are entirely unsubstantiated and unlikely to stand up to even the most cursory debate within state legislative subcommittees.

It is worth reiterating that the recommendation for a "competency-based" weighting, which also lacks substantiation, would undoubtedly divert resources from districts and children with greater needs to those with fewer needs, significantly undermining equity and equal educational opportunity. State legislators have, for decades, contrived clever adjustment factors to accomplish similar goals.⁴² It is unfortunate that this brief provides yet another

tool for this kit (though hardly a new one).

Worst of all, the authors convey reckless disregard for equity and equal educational opportunity through their outright denial of and recommendations in opposition to well understood, empirically validated factors affecting the costs of providing children equal opportunities to achieve common outcome goals. While the authors convey a superficial awareness that that these factors exist, they openly attempt to discredit these factors with no regard for the vast body of research on education costs and equal educational opportunity.

The authors conclude their brief with the statement:

ExcelinEd stands at the ready to provide technical expertise and assistance to state policymakers seeking to advance student-centered funding in the coming months and years. (p. 15)

Given the all too obvious lack of expertise presented in their policy brief, I would suggest that state policymakers pass on this offer.



Figure A1. Special education classification rates in Tennessee and the nation

Baker, B.D., Srikanth, A., & Weber, M.A. (2016). *Rutgers Graduate School of Education/Education Law Center: School Funding Fairness Data System*. Retrieved December 29, 2017, from http://www.schoolfundingfairness.org/data-download

Notes and References

- 1 Foundation for Excellence in Education (2017, November). Student-Centered State Funding: A How-to Guide for State Policymakers. Retrieved December 29, 2017, from http://www.excelined.org/wp-content/ uploads/2017/11/ExcelinEd.StudentCenteredStateFunding.AHowToGuideForStates.Nov2017-1.pdf
- 2 Baker, B.D. (2003). State policy influences on the internal allocation of school district resources: Evidence from the common core of data. *Journal of Education Finance*, *29*(1), 1-24.

Duncombe, W., & Yinger, J. (2011). Making do: State constraints and local responses in California's education finance system. *International Tax and Public Finance*, *18*(3), 337-368.

- 3 Baker, B.D. (2009). Within-district resource allocation and the marginal costs of providing equal educational opportunity: Evidence from Texas and Ohio. *Education Policy Analysis Archives/Archivos Analíticos de Políticas Educativas*, 17.
- 4 This model was common in southern states as a method for setting funding levels, based on staffing ratios prior to and in years following Brown v. Board of Ed. This model of calculating funding based on staffing lines and staffing salaries created opportunity in those states to assign lower salary levels to black teachers and thus less funding to schools serving black children. Some of these states eventually shifted to calculating funding based on the education levels of teachers, to maintain similar racial disparities in funding without mention of race in the calculation.

Baker, B.D., & Green III, P.C. (2005). Tricks of the trade: State legislative actions in school finance policy that perpetuate racial disparities in the post-Brown era. *American Journal of Education*, *111*(3), 372-413.

- 5 Chambers, J., Levin, J., Wang, A., Verstegen, D., Jordan, T., & Baker, B. (2012). *Study of a new method of funding for public schools in Nevada. American Institutes for Research*. Prepared for the Nevada Legislature, Committee to Study a New Method for Funding Public Schools, Interim Finance Committee. NV: Carson City.
- 6 For an overview of Tennessee's Basic Education Program, see: https://www.tn.gov/sbe/topic/bep
- 7 Baker, B.D., & Corcoran, S.P. (2012). *The Stealth Inequities of School Funding: How State and Local School Finance Systems Perpetuate Inequitable Student Spending*. Washington, D.C.: Center for American Progress.
- 8 Duncombe, W., & Yinger, J. (2011). Making do: State constraints and local responses in California's education finance system. *International Tax and Public Finance*, *18*(3), 337-368.
- 9 Kansas Legislative Research Department (2016). *School Finance History*. Retrieved December 29, 2017, from http://www.kslegresearch.org/KLRD-web/Publications/Education/2016_school_finance_history.pdf
- 10 Texas Association of School Boards (2016). Overview of the School Finance System. Retrieved December 29, 2017, from https://www.tasb.org/Services/Legal-Services/TASB-School-Law-eSource/Business/Financial-Responsibility-Guide/documents/overview_sch_finan_system_feb16.pdf
- 11 Mort, Paul R., & Walter Christian Reusser (1951). *Public school finance: Its background, structure, and operation.* New York City, NY: McGraw-Hill, p. 371.
- 12 Baker, B.D. (2014). America's Most Financially Disadvantaged School Districts and How They Got That Way: How State and Local Governance Causes School Funding Disparities. Washington, D.C.: Center for American Progress.
- 13 Chingos, M., & Blagg, K. (2017) *Making Sense of State School Funding Policy*. Urban Institute. Retrieved December 4, 2017, from https://www.urban.org/sites/default/files/publication/94961/making-sense-of-state-school-funding-policy_0.pdf

- 14 Footnotes iii vi, for example, cite to sources within the brief itself, with no further clarification.
- 15 Duncombe, W.D., & Yinger, J. (1999). Performance standards and educational cost indexes: You can't have one without the other. *Equity and adequacy in education finance: Issues and perspectives, 260, 261.*
- 16 Duncombe, W., & Yinger, J. (2005). How much more does a disadvantaged student cost? *Economics of Education Review*, *24*(5), 513-532.
- 17 Duncombe, W., & Yinger, J. (2005). *Estimating the cost of meeting student performance outcomes adopted by the Kansas State Board of Education*. A study prepared for the Kansas Division of Legislative Post Audit;

Baker, B.D., & Green III, P.C. (2009). Equal educational opportunity and the distribution of state aid to schools: Can or should school racial composition be a factor? *Journal of Education Finance*, 289-323;

Baker, B.D., Taylor, L., Levin, J., Chambers, J., & Blankenship, C. (2013). Adjusted Poverty Measures and the Distribution of Title I Aid: Does Title I Really Make the Rich States Richer? *Education*, *8*(3), 394-417.

18 Andrews, M., Duncombe, W., & Yinger, J. (2002). Revisiting economies of size in American education: are we any closer to a consensus? *Economics of Education Review*, *21*(3), 245-262;

Baker, B., & Duncombe, W. (2004). Balancing district needs and student needs: The role of economies of scale adjustments and pupil need weights in school finance formulas. *Journal of Education Finance*, *29*(3), 195-221.

19 Taylor, L.L., & Fowler Jr, W. J. (2006). *A Comparable Wage Approach to Geographic Cost Adjustment*. *Research and Development Report*. NCES-2006-321. National Center for Education Statistics;

Chambers, J.G. (1980). The development of a cost of education index: some empirical estimates and policy issues. *Journal of Education Finance*, *5*(3), 262-281;

Baker, B.D. (2008). Doing more harm than good? A commentary on the politics of cost adjustments for wage variation in state school finance formulas. *Journal of Education Finance*, *33*(4), 406-440.

- 20 Mort, P.R., & Reusser, W.C. (1951). *Public school finance: Its background, structure, and operation*. New York City, NY: McGraw-Hill, 371.
- 21 Baker, B.D., Sciarra, D.G., & Farrie, D. (2014). *Is school funding fair? A national report card*. Education Law Center.
- 22 Baker, B., & Green, P. (2008). Conceptions of equity and adequacy in school finance. *Handbook of research in education finance and policy*, 203-221;

Duncombe, W., & Yinger, J. (2008). Measurement of cost differentials. *Handbook of research in education finance and policy*, 238-256.

- 23 EdBuild's FundED report *Sparsity and/or Small Size Report: Policies in Each State*. Retrieved December 29, 2017, from http://funded.edbuild.org/reports/issue/sparsity/panoptic
- 24 These two articles offer summaries of numerous articles on this topic:

Andrews, M., Duncombe, W., & Yinger, J. (2002). Revisiting economies of size in American education: are we any closer to a consensus? *Economics of Education Review*, *21*(3), 245-262;

Baker, B., & Duncombe, W. (2004). Balancing district needs and student needs: The role of economies of scale adjustments and pupil need weights in school finance formulas. *Journal of Education Finance, 29*(3), 195-221.

25 Baker, B., & Duncombe, W. (2004). Balancing district needs and student needs: The role of economies of scale adjustments and pupil need weights in school finance formulas. *Journal of Education Finance*, *29*(3),

195-221.

- 26 Noting further that: "If your state wants to consider subsidies for smaller district, it can restrict these adjustments to when there is no reasonable alternative, e.g., students are spread over such a large geographic area that it is impossible to combine districts. Even then, your state can place the burden on districts to show that they have fully explored other options— including shared services and distance learning—and to make their proof again at least every few years. This extra support can also be a separate line item in your state budget each year, providing transparency and a trigger for policymakers to consider how else your state can use this funding to help students statewide."
- 27 Baker, B.D. (2008). Doing more harm than good? A commentary on the politics of cost adjustments for wage variation in state school finance formulas. *Journal of Education Finance*, *33*(4), 406-440.
- 28 Figlio, D.N. (2000) Can Public Schools Buy Better-Qualified Teachers? *Industrial and Labor Relations Review* 55, 686-699;

Figlio, D.N. (1997). Teacher Salaries and Teacher Quality, Economics Letters 55, 267-271;

Ferguson, R.(1991). Paying for Public Education: New Evidence on How and Why Money Matters, *Harvard Journal on Legislation 28*(2), 465-498;

Loeb, S. & Page, M. (2000). Examining the Link Between Teacher Wages and Student Outcomes: The Importance of Alternative Labor Market Opportunities and Non-Pecuniary Variation, *Review of Economics and Statistics* 82(3), 393-408;

Ondrich, J., Pas, E., & Yinger, J. (2008). The Determinants of Teacher Attrition in Upstate New York. *Public Finance Review 36*(1), 112-144;

Murnane, R.J. & Olsen, R. (1989): The Effects of Salaries and Opportunity Costs on Length of Stay in Teaching: Evidence from Michigan. *Review of Economics and Statistics* 71(2), 347-352.

- 29 Duncombe, W., & Goldhaber, D. (2003). Adjusting for geographic differences in the cost of educational provision in Maryland.
- 30 Taylor, L.L., & Fowler Jr, W.J. (2006). A Comparable Wage Approach to Geographic Cost Adjustment. Research and Development Report. NCES-2006-321. *National Center for Education Statistics*.
- 31 Bush School of Government & Public Service. Extending the NCES CWI. Retrieved December 29, 2017, from http://bush.tamu.edu/research/faculty/Taylor_CWI/
- 32 Bifulco, R., & Reback, R. (2014). Fiscal impacts of charter schools: lessons from New York. *Education Finance and Policy*, *9*(1), 86-107.
- 33 Duncombe, W., & Yinger, J. (2005). *Estimating the cost of meeting student performance outcomes adopted by the Kansas State Board of Education*. A study prepared for the Kansas Division of Legislative Post Audit;

Baker, B.D. (2011). Exploring the sensitivity of education costs to racial composition of schools and raceneutral alternative measures: A cost function application to Missouri. *Peabody Journal of Education*, *86*(1), 58-83.

- For more on state school finance and special education, see: Baker, B.D., Green III, P.C., & Ramsey, M.J.
 (2012). Financing education for children with special needs. *Handbook of leadership and administration for special education*, 97-114.
- 35 Baker, B.D., & Ramsey, M.J. (2010). What we don't know can't hurt us?: Equity consequences of financing special education on the untested assumption of uniform needs. *Journal of Education Finance*, 35(3), 245-275.

- 36 Baker, B.D., Srikanth, A., Weber, M.A. (2016). Rutgers Graduate School of Education/Education Law Center: School Funding Fairness Data System. Retrieved December 29, 2017, from http://www.schoolfundingfairness.org/data-download_
- 37 ExcelinEd (2017) Competency Based Education and School Finance. Retrieved December 29, 2017, from http://www.excelined.org/wp-content/uploads/2017/05/ExcelinEd.Competency BasedEducationAndSchoolFinance.May2017.pdf
- 38 Baker, B.D., & Bathon, J. (2013). *Financing online education and virtual schooling: A guide for policymakers and advocates*. Boulder, CO: National Education Policy Center.
- 39 Baker, B.D., & Elmer, D.R. (2009). The politics of off-the-shelf school finance reform. *Educational Policy*, 23(1), 66-105.
- 40 Samuels, C.A. (2012) Districts Experiment with Weighted Funding. *Education Week*. Retrieved December 29, 2017, from https://www.edweek.org/ew/articles/2012/06/13/35weighted.h31.html
- 41 Baker, B.D., Libby, K., & Wiley, K. (2015). Charter School Expansion and Within-District Equity: Confluence or Conflict? *Education Finance and Policy*;

Weber, M., & Baker, B. (2017). Do For-Profit Managers Spend Less on Schools and Instruction? A national analysis of charter school staffing expenditures. *Educational Policy*, 0895904816681525;

Baker, B. (2016). Exploring the consequences of charter school expansion in US cities. *Economic Policy Institute, November, 30*.

42 Baker, B.D., & Corcoran, S.P. (2012). *The Stealth Inequities of School Funding: How State and Local School Finance Systems Perpetuate Inequitable Student Spending*. Washington, D.C.: Center for American Progress;

Baker, B.D., & Green III, P.C. (2005). Tricks of the trade: State legislative actions in school finance policy that perpetuate racial disparities in the post-Brown era. *American Journal of Education*, *111*(3), 372-413.